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11 June 2007

VIA ELECTRONIC FILING

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission's Rules, WT Docket No. 06-169; The Development of Operational Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communication Requirements Through the Year 2010, WT Docket No. 96-86.

Dear Ms. Dortch:

On 8 June 2007, Dr. Ken Budka, Dr. Tewfik Doumi, via phone, and the undersigned, on behalf of Alcatel-Lucent, participated in a meeting with Fred Campbell, Chief of the Wireless Telecommunications Bureau ("WTB"), and Jim Schlichting, Deputy Chief of the WTB. The purpose of the meeting was to discuss, reiterate and affirm Lucent's position in the above referenced proceedings.

Alcatel-Lucent continues to support the need for a broadband-only 6 MHz broadband block in the 700 MHz public safety spectrum space. In addition, Alcatel-Lucent supports consolidation of the narrowband spectrum to the upper end of the public safety 700 MHz block. Alcatel-Lucent reaffirmed its belief that broadband is more cost-effective than wideband. Finally, if wideband is supported for rural coverage, the possibility of reusing as secondary operation the public safety's internal guard band or the public safety narrowband block should be explored. Further substance of the discussion is set forth in the attached handout.

In accordance with Section 1.1206(b)(2) of the Commission's rules, this letter is being filed electronically with your office. Please contact the undersigned with any questions in connection with this filing.

Respectfully submitted,



Michael T. McMenamin

cc: Fred Campbell
Jim Schlichting



Public Safety 700 MHz Recommendations

June, 2007

Alcatel-Lucent Position

Alcatel-Lucent supports consolidation of narrowband spectrum to upper end of the public safety 700 MHz block

Alcatel-Lucent continues to support **broadband-only 2x6 MHz block** in the Public Safety 700 MHz band

- If wideband is supported for rural coverage, it should be placed in public safety's internal guard band or in the public safety narrowband block

Alcatel-Lucent Position

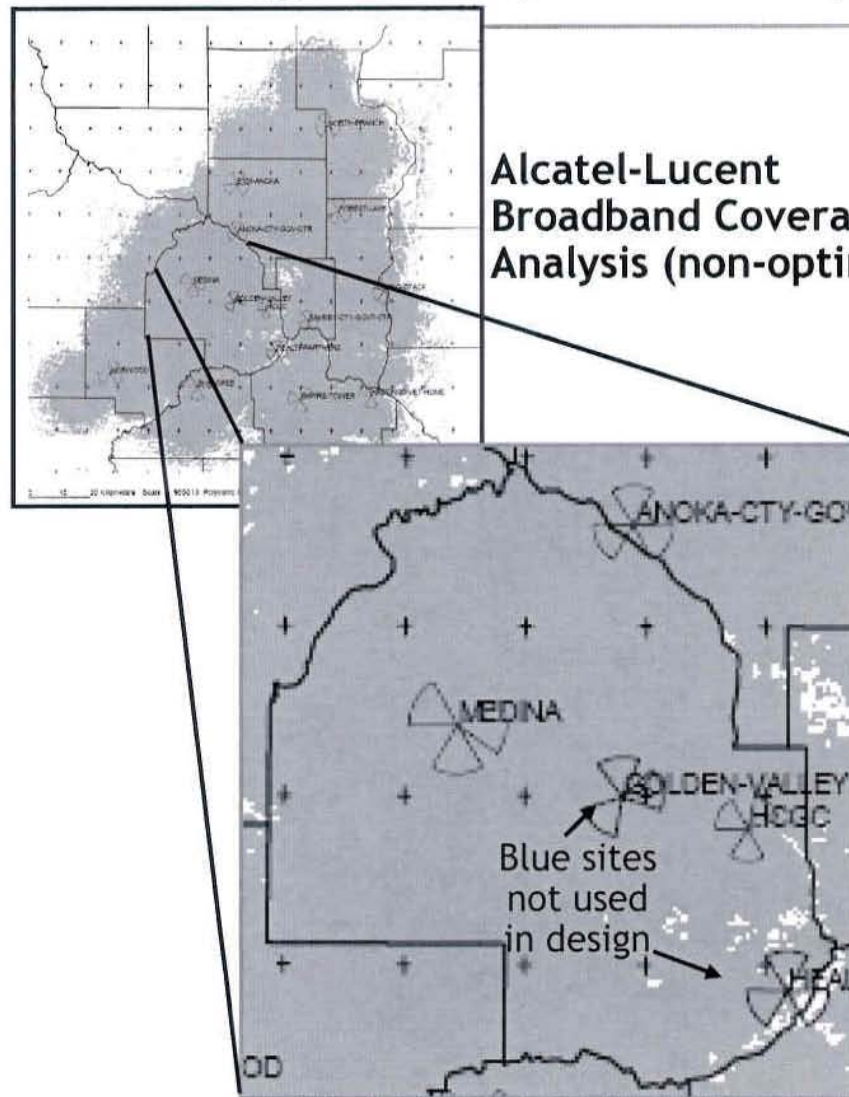
At comparable edge data rates, broadband provides comparable or greater coverage at significantly higher capacity than wideband

- Alcatel-Lucent initial RF coverage analysis example shows Hennepin County, MN can be covered with fewer broadband sites than wideband*

The Metropolitan Emergency Services Board's FNPRM Reply Comments indicate that typical wideband equipment is more expensive per site than broadband equipment

* This is in dramatic contrast to Macro Corporation's RF assessment, referenced by the Metropolitan Emergency Service Board (MESB) in their FNPRM reply comments. Macro's analysis suggests broadband requires 6x the number of sites to cover Hennepin County compared to wideband.

Coverage Analysis Example - Hennepin County



EV-DO Rev.A Technology

- 20 W Base Stations
- 300 mW (EIRP) Terminals
- Sites per Hennepin's Waiver

Balanced Edge Coverage Contour

- ~256 Kbps Forward Link
- ~256 Kbps Reverse Link

>95% of the Hennepin County is covered with fewer sites than wideband at higher data rates and higher capacity

Red 3-sector cells are active. Blue cells are non-active (not used)

Broadband provides better coverage, higher throughputs, with fewer base stations in Hennepin County and Surrounding Area than wideband

Macro Corporation's analysis cited in the Metropolitan Emergency Services Board's FNPRM Reply Comments:

Comparison of coverage and initial network costs for "high site" 700 MHz wideband vs. broadband systems in Hennepin County, Minnesota³.

Hennepin County, Minnesota 611 Square Miles

Number of Antenna Sites
Required

IBM
Broadband

Motorola
Wideband

18

3

Percentage of County Covered

90.6

95.9

Square Miles Covered Per Site

31

195

Infrastructure Cost Per Square
Mile*

\$15,496

\$5,773

* RF & Switch Costs Only -
Backhaul Costs are Excluded

\$504K per
IBM
Broadband
Site

\$1.13M per
Motorola
Wideband
Site

of Wideband Base Station Radios?
Wideband User Device Cost?
Wideband Data Carrying Capacity?
Wideband Data Rates?

Alcatel-Lucent's initial, non-optimized Coverage Analysis shows that fewer than 18 EV-DO Rev A Broadband sites (2 sited in Hennepin County) can cover 9 counties listed in Hennepin's waiver request, including Hennepin, using coverage requirements in the Metropolitan Radio Board's November 2004 Request For Proposal, while achieving substantially higher data rates (256 kbps) than possible with wideband

A Few Wideband Myths

Wideband Equipment is More Cost-effective

- Reply Comments from the Metropolitan Emergency Services Board indicate it is not

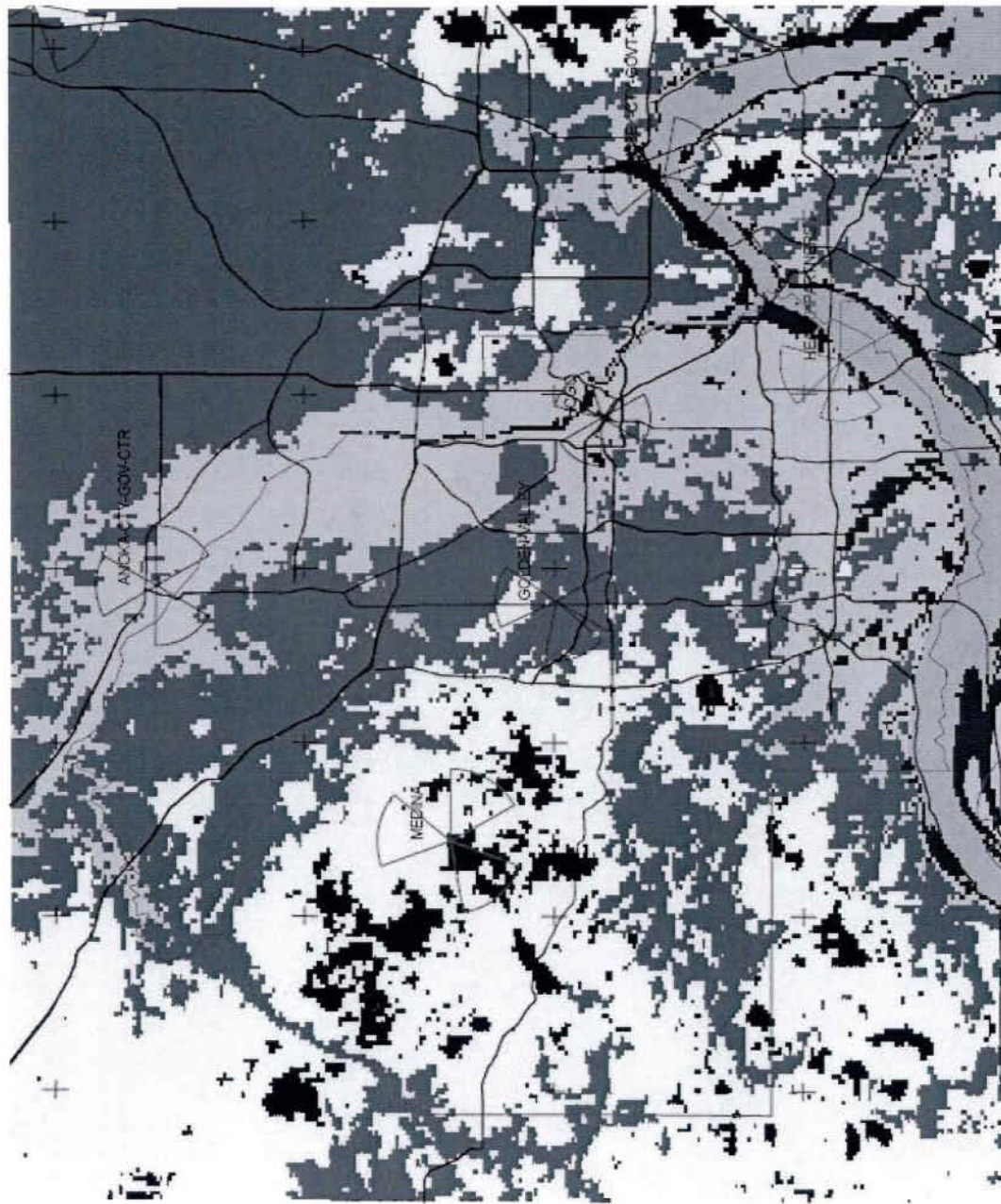
Wideband Offers Flexibility to State and Local

- Flexibility has led to spectrum fragmentation and eventually to lack of interoperability

Wideband Has a Longer Radio Range

- For every known mobile wireless technology the achievable radio cell range is at least a function of the planned data rate at the edge of the cell footprint
- Range comparisons must be done at a common data rate

Terrain Map - Hennepin County



AirPro version 4.10.1 - Hennepin county.mxd
 Tick marks: 100' 30" 100' 30" 100' 30"

Color Layer: Elevation

Elevation (ft)

510 - 540	540 - 570	570 - 600	600 - 630	630 - 660	660 - 690	690 - 720	720 - 750	750 - 780	780 - 810	810 - 840	840 - 870	870 - 900	900 - 930	930 - 960	960 - 990	990 - 1020	1020 - 1050	1050 - 1080	1080 - 1110	1110 - 1140	1140 - 1170	1170 - 1200	1200 - 1230	1230 - 1260	1260 - 1290	1290 - 1320	1320 - 1350	1350 - 1380	1380 - 1410	1410 - 1440	1440 - 1470	1470 - 1500		
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI

Map File:
 Hennepin County.mxd
 ANI_210.mxd

0 3 6 Miles Scale 1: 327721 Polyconic Projection